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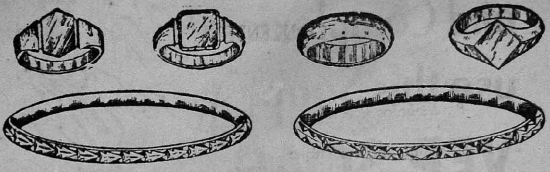

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PADMA SAMBHAVA *By Nicholas Roerich.*

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Worms

By NICHOLAS ROERICH

ALL kinds of injury are contained in foul-speech. In each noxious speaking can be found all abominable and shameful vices. Each evil speech contains in itself hatred and falsehood and treachery and all that which so impedes the well-being of humanity.

Even if ignorance shall lie at the base of all these vices, this still makes it no easier for the contemporary consciousness. What profound turpitude is contained in any treachery, in each falsehood, in slander and in a desire to injure one's fellow. Long ago these vices were placed in a group of the most abominable bestial manifestations.

The Apostle Paul, in his first epistle to Timothy, places falsehood, slander, perjury, in the series of the following loathsome manifestations.

"Know ye, that the law has been established not for the righteous, but for the lawless and the unruly, the impious and the sinful, the corrupt and the profane, for the offenders against father and mother, for murderers."

"For lechers, sodomites, kidnappers, slanderers, human beasts, liars, perjurers, and all the others who are opposed to sound doctrine."

You see in what a shameful list has been included liars and slanderers and all spoilers. And yet how easy it is amidst contemporary civilization to utter falsehood, slander, treachery, and all that can arrest the growth of useful things. There has even been spoken about a selflessness of evil, which in its violence actually reaches the point of self-abnegation. There are those who are prepared even to smite themselves provided they can sow evil.

Of course it is so easy to perform any treachery. Sometimes people do not even render themselves account that by a word or deed, they destroy that very thing with which yesterday they were in agreement and which they served. Some small evil-speaking has taken place, it may be from external irritation or it may be from some deeply concealed thoughts. Yet here these apparently small causes incite a man to begin to commit treachery, even though therein he harms himself.

Indeed, each treachery, as does each falsehood and slander, first of all bounds back upon the evil-speaker himself. This remains an immutable truth But it makes it no easier for the well-being of peoples the fact that any traitor or slanderer receives what he deserves. Nevertheless the places overgrown by the weeds of evil speech require much effort in order to clean them up again.

Evil speech, indeed, does not fall from heaven. It is begotten in the lowest strata of life. It grows slowly but inexorably, if only it be sown. At first the man learns to smile evilly, to shrug his shoulders evilly, then to utter the evil jest; he is elated by the irritation or the approbation of his companion, and then imperceptibly he becomes accustomed to the basest evil speaking.

Evil speech, the same as invective, is first of all a vicious habit. The Apostle was absolutely right in placing falsehood and slander in the list of offences contrary to nature. In the eyes of civilized society, any of the vices named by him are manifestly inadmissible. But not so with slander and treachery. Certainly they have not been expelled from the way of life, like bestiality. And of course all this testifies identically to a beastly state.

Noxious insects breed from filth and negligence. From such carelessness are also born the worms of treachery. People are advised not to feed dogs on raw meat. From raw meat worms appear in them, which are sometimes very difficult to get rid of. Are there not contained in meat-food all those grossnesses of life which are so injurious? Are not the worms of slander and treachery bred from the same causes as in the case of dogs?

Sometimes people attempt to explain treacherous and slanderous actions by small-souledness. In the last analysis, what is smallness of soul? After all, there certainly is the seed of the spirit in everyone. But it can become covered with dust and relegated into the cellars of the consciousness. Then it is more accurate to say, not small-souledness but mean-souledness. And this vice will also not be entirely natural, but will be engendered in the ugliness of a mouldy way of life.

The infectiousness of vices can be observed even in the smallest of them. In any group one has but to fall in with one or another vice to which one is attracted, and sooner or later one becomes a follower of

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it. Sometimes such an inwardly prepared follower will even condemn the vicious qualities observed by them. But then, little by little he will catch the pernicious habits. It is striking to observe how gradually a vicious habit takes root. Undoubtedly the man is ashamed of it. At first he unfailingly tries to conceal it, but later, seeing obvious examples of it and noticing that those surrounding him do not all change their attitude towards him, he wears his odious habit outwardly. And so no matter, he continues to dwell in a human-like society.

All kinds of worms exist. Physicians affirm that certain of them are extremely difficult to eradicate and their return is always possible. But no organism is wormy from the beginning. These vipers insinuate themselves very gradually, from envy, from self-pity, from stupidity, and in general, from ignorance

These pernicious worms are not spoken about in schools. They may be discussed only when they have appeared in some unseemly behaviour. But of course then it will be too late. Then is required not a prophylaxis but some special measures with the taking of not very pleasant remedies. The majority of people are very careful of their taste and do not like bad-tasting medicines. If a physician prescribes them, such people will try to consign these medicaments to the trash bin. It is better not to acquire the worms than to contend with them later.

There exists a terrible malady, the final stage at which all the pores of the body begin to give out worms. It is said that King Herod ended his life in such a fetid dissolution. Yet in each breath the stubborn traitor and slanderer exhale these same horrible worms, in their invisibility still more dangerous.

Yes, in the case of dogs worms are acquired from raw meat; from some such raw meat are bred the human worms which infect the whole surrounding atmosphere. From such meat people reach such a state of torpor that they lose the faculty of distinguishing colors, and they cannot listen to and understand the simplest things. Is this not from cannibalism?

In dogs worms are acquired from raw meat. Whence then comes that human grossness which reaches such a state of ravenousness that even the most steadfast ties find themselves broken. From very imperceptible vulgarities and meannesses are the human worms propagated. The example of the worm-eater King Herod has been noted down in history. Not without cause has the animal-like state of Nebuchadnezzar also been related. People try to avoid and to destroy rats which are the bearers of contagion. Then what about worms, both visible and invisible?

Broadcasting and the Public

By ESSOR

"EVIL communications breedeth bad manners" is a profound remark, perhaps wrung from some hard-pressed third class railway philosopher. And no department of modern communications comes more directly under this comment than broadcasting, the wonder (and the curse) of the age. Wireless, which began as an idle experiment in the seventies of the last century, had swiftly proved triumphant and had bridged time and space beyond the wildest dreams of the first experimenters. Today it carries light and culture, news and entertainment across the oceans and over the insuperable mountains. Popular education has been quickened. But propaganda, in its worst sense, too, has gained a terrible ally, unfortunately to poison the minds of men and sow dissension among the nations.

To lay all the chaos of our present times at the door of broadcasting would neither be fair nor accurate. And yet, its abuse in the hands of the aggressive powers today should only underline the urgent need for providing safeguards against the greatest achievement of this age turning into a Frankenstein's monster. And it becomes necessary for the man in the street to realise the potentialities of this new service and promote by determined and informed criticism, a constructive and wise use of broadcasting in this country.

The radio has come to stay in this country as a stable service and five years of development has given us today nine stations, serving at least as many linguistic zones. The latest figures reveal that there are over 90,000 radio licensees in the land. If we take into account the large number of "community" listeners and that larger species who get their newspaper and broadcast services gratis from their neighbours, there must be, even on a modest estimate, at least a million listeners in India, being affected deeply by the quality and nature of all this sound and fury projected at him. Is it bad music that is being broadcast? Well, that is a sure way of corrupting the tastes of a generation? Is it subtle propaganda, ill-informed discussion or slipshod entertainment? The listener is in danger. To turn to the brighter side, well planned "entertainment and instruction"—favourite expressions of the broadcasters ever since the B. B. C. Charter incorporated it in its text—will, open up new vistas of progress. It can teach man the greatest of arts, the wise use of leisure. It can bring the classroom to the home, quicken the wits of the growing child and enable a distraught generation to forget the worries of life and the blues of daily life and make democracy real.

When wireless emerged from its experimental shell, Americans saw in it a powerful ally of industry and created what is known today as "sponsored" radio. Some of the best entertainment and information is broadcast in the U. S. A. free to the listener, i. e. without any licence fees, with the attendant catch that he shall perforce listen to a lot of advertisement stuff about the soaps, tooth-pastes, vacuum cleaners and what not. That is a kind of abuse from which Indian broadcasting is fortunately free.

The other and worse kind of abuse is primarily of German origin. Directed by Dr. Goebbels and his Bureau of Propaganda working out every detail with the assistance of expert psychologists, the Nazi broadcasting stations project into the empyrean, hour in, hour out, cleverly fabricated and inflammatory tissues of half-truths, spreading discord and waging their favourite "wars of nerves". This, seen at its grossest in Nazidom, will easily infect the most liberal of services in some form if the keenest vigilance is not kept up. In the face of hostile political agitation, the Government or other agency which owns the radio may easily be tempted to use it for partisan purposes. Information of a certain kind can be cut out or worse, misrepresented by partial suppression. To prevent these and their like and enable broadcasting to develop as a genuine carrier of culture, good-will and sound entertainment, it is essential that it be kept free like the press, that the public subject it to fair criticism and refuse to take from the ether anything but the best. The very medium in which broadcasting works—the medium of air, which by its nature is accepted as common to all humanity—accentuates its free character. The radio is yours. You must help to keep it clean, sweet and nourishing.

Granted a "free" and fair broadcasting service, it may well be asked, what are the standards of good entertainment? Shall we have more classical music or new-fangled modes? Is daring experiment or traditional conservatism to be favoured? Shall we have controversial talks on the air? Are our broadcasters giving the best possible entertainment under the circumstances? If not, on what lines can they reform? Is their news service unbiassed and intelligently proportioned? Why are their dramas so dull? Or are they not? The answer to these and similar questions it is not the purpose of this article to attempt. But in the interests of better broadcasting, without any of the abuses and with all the technical and artistic advances found in other countries, every listener and member of the public must take a live, critical and constructive interest in the service. The broadcasters themselves are none too happy over the popular apathy to the kind and quality of the fare on the air, because the radio has yet to build up the technique and tradition for itself and that can come to pass only through live and alert co-operation from the public. The slogan is "Listeners of land, unite, criticise and co-operate".

"Founding a New World Order"*

By Dr. JAMES H. COUSINS

THE feared collapse of so-called civilization as a result of the possible world-wide extension of the wars now being waged in Europe and Asia has led to a number of schemes for the reorganization of humanity when the present conflicts ceased. The most deliberate and detailed of these efforts is that which has recently been given world-wide publicity for discussion by Mr. H. G. Wells, the famous novelist, who for a number of years has exercised his imagination towards the solution of world problems. He has drafted a new Declaration of the Rights of Man, but certain clauses of it have been badly mauled by eminent critical lions. Bernard Shaw has denied Mr. Well's claim that everyone has a right to legislate, and that home-life should be in water-tight apartments. Professor Haldane wants capitalism abolished as a preliminary step. Professor Joad demands the right to commit suicide. The leaders of religious thought consider the proposed Declaration lacking in its ignoring of the spiritual nature of humanity.

The latter is the most drastic criticism of Mr. Wells' effort, admirable as is its intention and worthy of all praise for its courage. His Declaration treats man as a relatively intelligent animal, and does not get down to the fundamental spiritual necessity in human nature and human relationships. Unfortunately, the criticism of the Declaration from the religious point of view is equally lacking in fundamental conception, as it interprets the spiritual necessity of humanity in terms of a single creed, and puts the myriads born into other creeds outside the scope of a theologically based world order.

There are two other flaws in Mr. Wells' foundations of a new world order. The first has been hinted at by Mr. Shaw. Mr Wells thinks in terms of democracy as expressed in votes and majorities. But a world order that shuts out other forms of human organizations is a misnomer, being as incapable of world application as a world order based on a single religious creed. A world order that is a mechanical uniformity will soon produce world disorder, since it is against the necessity of variety in human nature Mr. Wells has himself sensed this defect, and suggested committees abroad as well as in Britain for eliciting of other ideas. But his approach to the matter is essentially limited by a characteristic provincialism, which though necessary and admirable in a novelist on the spot, is not the best qualification for the founding of

* Synopsis of a lecture delivered at the Theosophical Lodge on "Founding of a New World Order".

a world order that has to realize and provide for the vast variety in human nature and its environment and traditions.

The second additional flaw is a psychological one. The restricted masculinity of Mr. Wells' mind shows itself in the terminology of his draft Declaration of the Rights of Man and vitiates the details of his proposed new world order. The structure of the new order is tragically single-sexed in its terminology, and is entirely outside the atmosphere and vision of the new world order that began to emerge when women wrested from men the rights of citizenship a quarter of a century ago, a world-transforming event that Mr. Wells probably heard of, but of the significance of which he appears to have no idea.

Any planning of a new world order that is based on centralized organization, or on a single mode of thought, religious, political, economic or other, is doomed to failure. As expedients they might be inevitable. They might even effect an apparent temporary cure. But prevention of the complicated pathological condition that led to mutual large-scale slaughter and destruction, and to the vast and steep degradation of human feeling and aspiration that threatened the entire race with its infection, will not come by prescriptions or operations for disease. It will only come through recognition and application of the laws of individual and collective health. Such laws are ultimately few and simple. They might be tabulated as applying to the organization, interaction and expansion of life.

No war-free organisation of human life is possible unless it is pivoted on the law that every man, woman and child has the right to live happily in the expression of his distinctive capacities, and the duty to live co-operatively and productively in mutual service with all other individuals and groups of humanity. That law is no fabrication of the brain or of shifty sentiment, but is proclaimed in every atom and congeries of life, and realizable in ten minutes of fundamental thinking. Its application politically will eliminate antagonisms within and between nations and sub-nations, without interfering artificially with various modes of life that are natural to various types of temperament in various kinds of environment. Economically it will secure the necessities of life to every individual without destroying the incentive to special characteristic effort which is the spice of healthy living. Culturally and religiously it will liberate into the fullest expression the creative artistic impulse and the desire for the highest experience that is at the centre of human life but is frustrated by false objectives and exclusions. By seeing all varieties of cultural and aspirational expression with the eye of the gardener who rejoined in variety in unit, it will infinitely enrich and elevate all phases of cultural and spiritual life.

The same law, which might be termed law of the unity of life and the community of its forms, will, if put into practice, so transform the

interactions of humanity that the superiorities, compulsions and inhibitions which have led to worse than a decent jungle existence in most of Europe and a large part of Asia, will disappear. Appreciation will take the place of censoriousness. Exploitation will disappear, but true emulation will emerge and carry human knowledge and achievement to heights at present inconceivable. Economically the law of unity in variety will stimulate the maximum of production in the various areas of the world, first for indigenous necessity, and then for mutual exchange.

Such a renovation of human life will naturally lead to vast expansions in all its phases. But the operation of the law of mutual service coincidental with liberated individual capacity will make impossible the cornering of any forms of expansion for the aggrandizement of an individual, group, or nation. This will apply not only to material things but also to the things of the inner being, the deeper powers of the mind and soul, and the as yet unveiled powers of nature that regenerated humanity would discover and use. In the new world order, based on the law of life and not on pathological expedients, such expansions will be accessible to all, since the reorganization of life in the manner indicated will eliminate the selfishness, baseness, sensuality and ruthlessness that at present debarred all but a few from experience of them.

The indication of the foundations of a true world order that provided for both individual and common necessities, may be considered as being a paraphrase of the three objects of the Theosophical Society. All who felt the seriousness of the world situation should study the implication of those objects which might be simply stated as human unity organized for mutual helpfulness and growth, and anticipate the new era, after the appaling obsession of friendish cruelty in Europe have been dissipated, by establishing in their own lives the conditions of selfless service and purity that led to peace.

"Silent" Memories

By R. R.

A densely packed city crowd sat in the "Kinema Central' about ten years ago—that picture house was then located in the upstair hall in Govindappa Naick Street which bears the name of "Soundarya Mahal"—and gave itself up to the pathos of the film which it was seeing. I remember that swealtering February afternoon-show vividly, because I have always felt convinced that the film which that audience was so enthusiastically welcoming marked the dawn of the "humanistic" picture on our screen. The film was "Gunasundari"—Gohar's Gunasundari.

Gohar was beautiful in it. She was young, lithe, had a face and eyes unparalleled in those days—or these--for the liquid mobility of their expression. She was venturing out on untrodden grounds. Again and again in the scenes of that picture she presented us with the different phases of a character never before attempted; through an impressive array of succeeding films she perfected it and became the symbol of the Hindu ideal of brave, gentle, unsophisticated womanhood. The Kohinoor Film Company of Bombay, which gave her her first successes gave place to "Jagadish," and "Jagadish" gave place to "Ranjit", but through the fluctuating fortunes of these concerns, Gohar's flag flew ever higher. Year after year, she and her collaborators succeeded in smashing through the unrelieved flatness of stunt pictures and romances, in which young princes killed bad people by the dozen and married a bunch of long-enduring princely maidens. They established a tradition on which latter-day producers have worked, refining and improving it; and Gohar herself climbed to acting levels unknown in those times.

But it is not my purpose here to trace the growth of Gohar's artistry. I am only concerned to recall the outstanding memories which those days of the film industry have left behind in the mind of a habitual cinema-goer. And though as the greatest star, I think, of the silent days, Gohar deserves special mention, she was not by any means the only figure which dominated the firmament; there were other artists—Gulab, Jillu, Shanta Kumari, Putli, Gohar Karnataki, and the rest, and of course, Sulochana, of the "Imperial". Sulochana was a very popular figure and imported much more of dash and a little less of sustained emotion than Gohar into her own acting. Her name had appeared at the head of a long list of successful films and contributed to their drawing power. She clung to the "Imperial" to the last, like Gohar, made some valiant efforts to preserve her popularity even after the advent of the talkies, apparently suffered a defeat and sank into oblivion.

Among the men who dominated the silent screen, Vithal and Raja Sandow, D. Billimoria and E. Billimoria and, in the later days, Jal Merchant stand out. Vithal came as the answer to those who had seen Douglas Fairbanks, dashing and swaggering through "The Thief of Bagdad" and the "Don Q" pictures and yearned for some one who would do something equally exhilarating on the Indian screen. He was perhaps an indifferent answer, but it was the best which ever came, and the lovers of Indian films enthused over his climbs and sword-plays and horse-riding for many years. Raja Sandow was of a different type; his was heavy work. He provided the foil to Gohar's emotional flights and went through picture after picture with an expressionless doggedness which still held some art and gave him the reputation of being the ideal leading man for that star. D. Billimoria supplanted him in the team in later years, the years of Ranjit Film Company's successes, and made a very handsome partner for her, just as he had made a handsome partner earlier for Sulochana. Looking handsome—with or without a violin on his shoulders and what looked to all intents and purposes like a song on his lips—was indeed his *forte*. E. Billimoria, on the contrary, struck out for fast-paced action. He specialised in the stunt business too, but it was made of a different variety from Vithal's. Jal Merchant's was a fleeting, breezy innings at the tail-end of the silent days.

I have mentioned thus much about the artistes and nothing at all about the producers and directors of the silent days—of Ardeshir M. Irani, Maneklal B. Patel, Choudhuri, Chandulal Shah, Bhavnani and the others—because I think that from this distance, the Silents are more interesting to us for the performances of the "stars" than for any outstanding achievement of production or direction. Even "Anarkali", "Gunasundari", "Chandramukhi" "Father India", and the rest of the successes which excited so much enthusiasm each in its day, were remarkable more for the acting in them than for any brilliant or subtle ideas in the development of the themes or in their picturisation. Even Mr. Phalke's mythological subjects and the spectacular efforts which came from the Maharashtra Film Company's studios were not impressive enough, looking at them from this distance to leave a lasting mark. Of Bengal's contribution to the silent screen, we know little in South India; for Bengal only leapt into inter-provincial fame with the coming of the talkies, and of course it achieved the feat overnight. I must, however, make an exception in the case of a little-advertised picture which came from the "Imperial" and was a beautiful, sensitive piece of work a film titled "Gita Saram" which was as remarkable in its way as another little-advertised effort which came in the first days of the Talkies: I refer to Mr. J. K. Nanda's "Sacred Ganges" which remains to this day, I think, the most ennobling expression in celluloid of a spiritual theme to come from any studio in India.

The coming of the talkies has indeed ushered in a new phase in the life of our film industry. "Imperial" of Bombay started the run with their "Alam Ara", a fantastic story with several fine "canyon" scenes woven into it "Madan Theatres" of Calcutta followed with their Nissar and Kajjan musicals—things full of sonorous, full-throated songs and cardboard backgrounds, which sometimes stirred in the wind and often trembled preceptibly when the actors leant on them in uncautious artistic frenzy. They ran for weeks and weeks in the cities, because the public were intoxicated with the sheer novelty of it all. The old producing units, spurred into action by the new phenomenal money-making possibilities changed over as quickly as they could to the talkies, adopted new innovations, studied the new technique, fluttered and mostly failed. Some of them were swept out of existence—the "Sarada", the "Krishna", the "Maharashtra", and the "Hindusthan" for example—some like the "Ranjit" kept their head above the tide, and waited patiently for the cycle of things which would bring them back their old eminence. The "Imperial" bequeathed its legacy to the "Sagar" which is carrying on bravely and thinking out new lines. The "Prabhat"—in some ways the inheritor of the tradition of the "Maharashtra" loomed suddenly on the horizon at a time when the silents were already on the down-grade, bringing in a thoroughness in production and an attention to details almost unknown before, grew rapidly in fame and, with the advent of the talkies, changed over with infinitely greater success than its west coast contemporaries. The "New Theatres" of Calcutta suddenly shot into the lime-light, thanks to the genius of Devaki Bose, who created "Puran Bhakt" and "Chandidas" for it. These two pictures have created a tradition and set the pace for a new and infinitely more artistic era of film production and direction. Jayant Desai stepped to the rescue of "Ranjit 's" popularity with his light-hearted films in which Ghory and Dixit mimicked Laurel and Hardy in fine style. Gohar herself did some fine work for this concern with her "Sati Savitri" and other pictures which gave good promise. Her retirement subsequently has been inexplicable. Recent news tells us that she is making a "come-back" in a picture which depicts the sorrows of the oppressed classes of the Hindu population. It is a role which is after her own style and all lovers of the old-timers will wish her well.

I will close as I began, with this reference to Gohar; for to traverse into more recent times would be to leave the realms of the Silents far behind - and that would be beyond the scope of this article.

Vitamin A and Carotene in Human Nutrition

By Dr. K. V. GIRI, M. Sc., A. I. I. Sc., D. Sc.

(Andhra University, Waltair).

VITAMIN A was discovered as early as 1913 when it was found that animals kept on diets containing protein, starch, sugar, salts and fats like lard, failed to grow. The inclusion of butter to such a diet, however, hastened the growth of the animals. These early observations led to the recognition of the existence of a growth-promoting substance, in butter and milk This growth constituent was subsequently found to be present in egg-yolk, kidney, liver fish-liver oils, and has come to be known as vitamin A. This Vitamin is also necessary for growth in human beings. It has now been obtained in pure form and its chemical constitution is known.

Vitamin A is one of the food factors which are essential to health at all ages. It is essential to growth, to vision, and the maintenance of normal health and integrity of the epithelial structures of the body, which form the defence against bacterial invasion.

Carotene (Provitamin A)

Some foods contain certain substances which are physiologically inactive, but are easily converted into active vitamins in the body. Such substances are called provitamins. The active vitamin A is distributed only in foods of animal origin like milk, butter, liver, egg-yolk etc., and it is totally absent in foods of plant origin. There are, hcwever, certain yellow pigments called carotenes which possess provitamin properties. These pigments are widely distributed in plants and animals. They are present in carrets, cabbage, tomatoes, butter, eggs and in many green leaves. There are at least three closely-related pigments such as *alpha*, *beta*, and *gamma*-carotenes, all of which possess the vitamin A value to varying extent The *alpha* and *gamma* forms of carotene are physiologically only half as active as the *beta* form. A large percentage of carotene present in foodstuffs, however, occurs as *beta* carotene. Vitamin A and carotene have the same physiological function, carotene being converted into active vitamin A more or less easily in the body. It is otherwise known as provitamin A or the precursor of vitamim A. The term vitamin A, therefore, includes vitamin A proper and the provitamins A *alpha*, *beta* and *gamma* carotenes. Deficiency of vitamin A may be remedied by the administration of either vitamin A or its precurser carotene. For practical purposes, therefore, carotene many be considered as the equivalent of vitatim A in human nutrition.

Effects of vitamin A deficiency.

In general the symptoms of vitamin deficiency is difficult to recognize, when it occurs in a mild form, until it develops into gross symptoms of avitaminosis, which are very easily recognised without any difficulty The earlier effects, the milder symptoms, known as mild or subacute deficiency, resulting from partial deficiency of vitamins, may escape notice if the diagnosis is based solely on clinical symptoms. It is, therefore, necessary to know the characteristics of various degrees of vitamin A deficiency.

Eye changes.

Night blindness. It has long been recognized that certain eye defects are associated with faulty nutrition. The first symptom of early vitamin A deficiency is night blindness. The occurrence of night blindness and its effective treatment by animal foods such as the liver, were known long before the vitamins were discovered. In order to understand the relationship between vitamin A and sight, it is necessary to know physiological processes of sight. The eye has the power to accommodate itself to alterations to illumination, and this power is known as adaptation. It is of common observation that when an individual comes out of bright sunlight into a room which is dimly illuminated, the surrounding objects can only be seen clearly after some time as time is necessary for the adaptation of the eye to the dim light. The time necessary for this adaptation can be measured. Failure of adaptation of the eye in reduced light is known as night blindness, hemaralopia or nyctalopia. Persons with night blindness can see only in bright sunlight. The vision is shown to depend on the presence of a substance known as visual purple, which is present in the retina of the eye. This substance is bleached in light, and its colour is again restored in darkness. The rate of bleaching of this visual purple is shown to control the power of the eye to adapt itself to light. Vitamin A enters into chemical combination with a protein to form the visual purple. The substance formed from the visual purple when it is bleached by light is known as visual yellow. The yellowish- orange colour of this pigment is due to retinene which is changed to vitamin A, from which visual purple is resynthesised. These processes involve the loss of some vitamin which must be replenished for maintaining the retinal efficiency. The restoration of visual purple after bleaching is delayed when there is deficiency in vitamin A, and the speed and amount of regeneration of the pigment in the dark, therefore, depends on the presence of an adequate amount of vitamin A. On this fact is based the widely-used test for slight degree of deficiency of vitamin A in human beings in which the power of the eye to distinguish slightly illuminated objects in a darkened room is measured. This test is known as Biophotometer test, which is now being widely used as a means of diagnosing subclinical vitamin A

deficiency. In the absence of other visual symptoms, night blindness may be considered as evidence of vitamin A deficiency. With the aid of this test it has been shown that vitamin A deficiency is prevalent among school children in various countries. Even in western countries where the economic status is much higher than that in India, it is found that an alarmingly high percentage of population suffer from mild vitamin A deficiency.

It is very difficult to detect night blindness among individuals suffering from vitamin A deficiency, except by the elaborate scientific method, which involves special apparatus and technique for measuring the dark adaptation. Persons with night blindness see normally in day time, but in the dark they are at a serious disadvantage if they look at a bright light, since they are unable to see at all for some time afterwards, and this defect in the adaptation of the eye to light may lead to injuries to themselves and to others. There are very few occupations which require men to work or go about in light which is less than adequate for inefficient dark vision. In certain occupations, however, like motor driving, efficient adaptation to low intensity of light, and to sudden changes in illumination is of the greatest importance. It is said that many motor accidents at night are, in a majority of cases, due to such defects in adaptation. Persons with night blindness can see normally in day light, but they are unable to drive automobiles at night. Night blindness is, therefore, an important traffic problem. It is well known that while driving a car the vision is somewhat impaired for a few seconds after seeing the brilliant glare from the head lights of an oncoming car. In the case of a driver suffering from vitamin A deficiency, this period of blindness is prolonged and he may require more time than normal persons, to regain complete vision. He is thus compelled to drive the car while virtually blind and the dangers involved on such occasions are obviously great. It is, therefore, necessary that chauffeurs should undergo periodical examination for night blindness. It is now demonstrated that administration of vitamin A improves night blindness. Reports have been published on the improvement effected in the capacity of motor-car drivers to drive at night as a result of the administration of vitamin A concentrate for a week or two.

Bitot's Spots: These are yellowish, irregular, foamy patches formed on the conjunctiva, as a result of vitamin A deficiency. It is reported Bitot's spots occur in a small percentage of the poorer class of children in South India.

Xerophthalmia and Keratomalacia: The outstanding symptom of vitamin A deficiency is the development of eye lesion, which is known as Xerophthalmia, meaning a dry (xero) condition of the eye ball, without liquid discharge. The constant flow of tears in the eye is very essential to preserve the delicate structure; as it prevents

bacterial invasion. When the flow of tears is stopped, as a result of vitamin A deficiency the eye becomes dry and ulcers form on the cornea, the transparent part of the eye ball, which allows light to the interior of the eye These ulcers later break down, and the eye lens is damaged, thereby destroying the sight completely. This advanced eye disease is known as *Keratomalacia* (softening of the cornea) which is found to be very common in India. It is said that Keratomalacia is the chief cause of thousands of cases of blindness annually in India. Xerophthalmia can be successfully treated by the administration of cod-liver oil or by feeding vitamin A concentrates.

Changes in the skin: In addition to the eye changes caused by vitamin A deficiency in the diet, the occurrence in infants and adults of a dry, harshy and scaly condition of the skin, has been reported by several workers As a result of the deficiency, the skin becomes dry, and assumes earthy colour. The hair also becomes dry and lustreless and tends to fall out. In severe cases, the skin of the body becomes dry, inelastic, grey in colour, covered with scales and scraching produces powdery desquamation. In some cases there will be papular eruptions on the skin. This condition of the skin is known as *toad skin* or *Phrynoderma*, which is a manifestation of a nutrition deficiency in which lack of vitamin A is an important factor. Such skin eruptions are found to be very common among poorer class children and adults in India. The papular eruptions on the skin can be effectively cured by the administration of an ounce of cod-liver oil daily, and by providing a well-balanced diet containing milk and eggs.

Other effects. Certain forms of difficult hearing are found to be related to vitamin A deficiency. Similarly deficiency of this vitamin has been said to be of importance in certain cases of anaemia, sterility and pathologic changes in the skin, teeth and gums. It is said that the incidence, severity and duration of "colds" may be greatly lessened by the administration of vitamin A.

Vitamin A units

It is customary to express the vitamin content of foodstuffs in terms of widely recognised and acceptable units. An International standard for Vitamin A has been established by the Health Organisation of the League of Nations, and it is now possible to express the vitamin A content of foodstuffs in terms of the standard. 1 international unit of vitamin A is defined as the vitamin A activity of 0·6 microgram (0·0006 milligram) of pure beta carotene. The latter, as pointed before, is converted into vitamin A inside the body.

Vitamin A requirements.

In order to know whether a particular diet is sufficient to meet the body's needs in respect of vitamins, it is necessary to know the normal

requirements for each vitamin. The human requirement for vitamin A has not been exactly worked out. It appears that the minimum requirement of vitamin A for an average man weighing about 70 k. gm. would be from about 3000 to 4000 International Units per day. The League of Nations Health Committee (1933) has recommended that during pregnancy and lactation the mother should receive at least 5000 International Units of vitamin A daily. For infants 1500 International Units per day of vitamin A has been suggested as the minimum requirement, and about 2000—2500 Units as a suitable daily allowance. According to the Bureau of Home Economics of the United States Department of Agriculture the human vitamin A requirements range from 4200 International Units daily for a child under 4 years of age, upto about 5600 International Units daily for a very active man. For all practical purposes, however, 3000 International Units per day may be taken as the minimum requirement for adults.

Vitamin A and carotene content of foodstuffs.

The body's supply of vitamin A is mainly dependent upon the foodstuffs we eat. A large proportion of the vitamin is injested in the form of its precurser carotene. The vitamin may be provided by including sufficient quantities of vitamin-containing foods in the diet. We have many foodstuffs which are known to be very rich in this vitamin. It is present in greater amount in butter, egg-yolk and cod-liver oil. Vitamin A and carotene are fat-soluble substances, and therefore they always occur in association with fats and oils.

Vitamin A content of various oils. Fats and oils derived from vegetable materials do not contain vitamin A. Certain animal fats, e. g., cod-liver oil, are very rich in this vitamin Among vegetable oils, red-palm oil is a rich source of carotene—the provitamin A. Reference to the dietetic value of this oil will be made in a later section.

Cod-liver Oil. The importance of cod-liver oil as a source of vitamin A and D in medical practice is too well known to need special mention. The oil is not only rich in these vitamins, but also contains in addition certain unsaturated fatty acids, which are of great therapeutic value. Cod-liver oil is prepared from the fresh liver of the cod fish. It is a pale yellow-coloured oil with a slightly fish odour and taste. In addition to cod-liver oil, other fish liver oils are also found to be good sources of vitamin A. Halibut liver oil is found to be about 50 times richer is this vitamin than cod-liver oil. But the liver, which in the cod is enormous, is very small in the halibut and hence the quantity of the oil obtained from the halibut liver is very little compared to that obtained from cod-liver. A knowledge of the vitamin A content of different varieties of Indian fish oils is of great importance from the point of view of nutrition in India, for some of the Indian fish liver oils are found to be as good or even more potent sources of this

vitamin than the liver oils imported from foreign countries. The following table gives the vitamin A content of some fish liver oils, both Indian and foreign, and for purposes of comparison figures for vitamin A potency of red-palm oil and other oils commonly used in Indian dietary are included.

	Vitamin A content per gramme.	
	in microgrammes*	in International Units
Halibut liver oil	20400	53000
Shark liver oil (Indian)	7600	19760
Sardine fish oil	947	2462
Norwegian cod-liver oil	156–560 (average 320)	405–1456 (average 832)
Indian cod-liver oil	1000	2600
Other fish oils	less than 300	less than 780
Red-palm oil	...	600-1900 (carotene in International vitamin A Units.)
Ghee	10	26
Butter	14	
Milk	...	1–3
Olive oil, gingelly oil,		
Coconut oil, mustard oil,		
Groundnut oil, cocogem,		
Linseed oil.	0	0

* 1 microgramme of vitamin A = 2·6 International Units.

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It is clear from the above table that fish liver oils in general are very rich in vitamin A. Indian cod-liver oils are more potent than the Norwegian cod-liver oil, which is commonly used in medical practice. Fish liver oils with high vitamin A potency can be prepared from several species of fish of the Madras coast. Most of the oils obtained from the livers of a few fresh-water fishes of Bengal and Assam, are found to be richer than cod-liver oil in their vitamin content. It is clear, therefore, that there are available in India fish liver oils having high vitamin A potency, which could be used for medicinal purposes. In particular the manufacture of oil from shark liver may prove an economic proposition, in view of the fact that large quantities of the oil can be obtained from one single fish. It is estimated that nearly 10,000 pounds of cod-liver oil costing approximately Rs. 1,50,000 are annually imported into India. The possibility of manufacturing liver oils in India should be considered both from industrial and public health points of view.

It is found that the samples of medicinal cod-liver oil show wide variations in their potency ranging from 390 to 1500 International Units per gramme of the oil. It may probably be due to the loss in potency which occurs as a result of bad storage for long periods and exposure to the hot climate. It is, therefore, suggested that from the

public health point of view and in the interest of the lay public who are ignorant of the quality of the preparations at the time of buying, the manufacturers should state the potency and the extent to which such preparations can be stored without much loss of the vitamin, particularly in tropical countries like India.

The daily requirement of vitamin A (3000 International Units) can be obtained from :

1 teaspoonful of good cod-liver oil.
2½ pints of milk
5½ ozs. of milk.

In addition to the above foodstuffs which are rich in Vitamin A we have many foodstuffs which are rich in carotene, the provitamin A.

The following list gives the comparative carotene content of ordinary articles of food, used in Indian dietary.

Carotene values of foods.
(expressed in terms of International Vitamin A Units)

Very rich. (Foods containing more than 10,000 International Vitamin A Units per 100 grammes.)	*Rich.* (Foods containing 1000 to 10,000 International Vitamin A Units per 100 grammes)	*Moderate* (Foods containing 100 to 1000 International Vitamin A Units per 100 grammes)	*Poor or absent.* (Foods containing less than 100 International Vitamin A Units per 100 grammes)
Red-palm oil	Carrots	Jack fruit	Water melon
coriander leaves	mangoes	orange	guava
amaranth leaves	papaya	plantain	grapes
drumstick leaves	spinach	figs	roots and tubers (except carrot)
betel leaves	fenugreek leaves	chillies	rice and other cereals
'Agathi' leaves	cabbage	cashewnut	milk
		tamato	
		pumpkin	
		snake gourd	
		peas and beans	
		pulses	
		nuts and oil seeds	

The above list of articles of food showing their vitamin values, while not exhaustive, may be useful in drawing up a dietary to satisfy the minimum requirements of vitamin A.

The dietetic value of red-palm oil : Among the natural foodstuffs so far examined, the red-palm oil is the richest source of carotene. The oil is derived from the fruit of the West African palm *Eloeis guinensis*. It is cultivated chiefly in Africa, Malaya and to a certain extent in Burma. Among vegetable oils, the palm oil is the only rich source of carotene. The oil is deep yellow in colour, and the pigment is entirely carotene, which is responsible for its vitamin A activity. The oil obtained from unripe fruits possess vitamin A activity of about 600 International Units per gramme while the oil obtained from ripe fruits contain 1600 – 1900 Units per gramme. Thus the vitamin A potency of the oil is of the same order as that of cod-liver oil, and about ten

times greater than that of butter. Red-palm oil forms, therefore, a fair substitute for cod-liver oil. Since it is the only vegetable oil rich in provitamin A, which is lacking in most of our Indian dietaries, the question of its production and use deserves special attention.

The oil has a peculiar taste and smell and as such it cannot be recommended alone as food material. It can, however, be used by mixing it with other common Vegetable oils for cooking purposes. It is found that when the proportion of the oil in the mixture is small (about 10 per cent), the material is quite palatable, without any disagreeble taste or smell. The vitamin A potency of such mixtures is about three times that of good samples of butter. The vegetable oils that are commonly used in our Indian dietary can, therefore, be enriched with vitamin A, by the addition of red-palm oil in suitable proportions. Since the price of red-palm oil is of the same order as that of other vegetable oils, the incorporation of the oil in our dietary should be encouraged. In Africa it is regarded as a delicacy both by the European and native population. They use red palm oil in the same way as we employ ghee and other edible oils in cooking. It is found that food materials cooked in oils admixed with red-palm oil contain enough carotene.

Vitamin A deficiency is so prevalent among the poorer classes who cannot afford to purchase rich sources of vitamin A like codliver oil, that every effort should be made to produce and distribute cheap sources of the vitamin among the poorer population in India. Red-palm oil which is a relatively cheap substance is very valuable as supplement to a diet which, because of economic reasons or poor dietary habits, is inadequate and in cases where the requirement of vitamin A is increased to such an extent that it cannot be met by food alone. It is said that the amount of vitamin A which can be purchased in the form of red-palm oil is roughly three times the amount purchasable in the form of cod-liver oil. The oil can be used in clinical work in hospitals and dispensaries Recently Dr. W. R. Aykroyd, Director, Nutrition Research Laboratories, has drawn pointed attention to the value of red-palm oil as therapeutic agent in treating acute deficiency cases. The production of red-palm oil on large scale is, therefore, an important industrial organization in the improvement of national health.

Effect of cooking and storage on vitamin A.

During cooking vitamins may be lost either by diffusing into the cooking water, which is generally thrown out, or by destruction due to boiling. In the case of vitamin A and carotene, however, the ordinary methods of cooking do not affect them to an appreciable extent, as both of them are insoluble in water. It has been shown that the carotene contained in carrots, cabbage and other vegetables is not much affected when they are boiled. Similarly the animal products such as liver and eggs do not lose their vitamin A when they are cooked.

Vitamin A is very stable to heat at ordinary temperatures. But at high temperatures in presence of oxygen, air, or oxidising agents both vitamin A and carotene are very readily destroyed. They are, however, more resistant to destruction when they exist in their natural sources as in foodstuffs. It is well known that 'dhals' (legumes) can be quickly cooked, if they are boiled in an alkaline medium containing sodium bicarbonate. Sometimes foods are cooked in acid medium with the addition of a little tamarind. It is found that the use of tamarind and sodium bicarbonate in cooking does not affect the vitamin A and carotene content of foods. Boiling is found to destroy to a little extent the vitamin A present in milk.

During the process of melting of butter into ghee an appreciable loss (10 to 20 per cent) of vitamin A is found to occur, the amount of loss depending on the duration of heating. Aeration, hydrogenation and mere heating cause considerable destruction of the vitamin contained in butter, ghee, cod-liver oil and red-palm oil. It is found that ghee used in frying potato chips loses a considerable portion of its vitamin A content during each operation of frying. Butter stored at temperatures prevailing in tropical countries like India, loses its vitamin A potency more rapidly.

It is of common obseravation that vitamin A present in cod-liver oil is gradually destroyed when exposed to ultra-violet rays or to sunlight, especially in presence of air or oxygen. It is, therefore, necessary to store the oil in either dark bottles or kept in the dark. Similarly butter also loses appreciable amounts of vitamin A when it is exposed to sunlight for long periods.

Vitamin A deficiency in India and its prevention.

With the prevalence of poverty and lack of knowledge in nutrition in our country, obvious vitamin A deficiency diseases like night blindness, xerophthalmia have become more and more common among poor people. The diets of the children of the poorer classes are very deficient in this vitamin, and the growth of such children is very subnormal. The deficiency of this vitamin in their food is one of the important factors contributing to their stunted growth. Night blindness occurs in young children and among poor people who subsist mainly on milled rice and whose diet includes little or no milk and vegetables. Night blindness has always been common among poor people in India. Liver has been used as a cure even before vitamins were discovered. In Calcutta it was being cured by feeding liver.

Keratomalacia is very common in South India and it is one of the most frequent causes of permanent blindness. Dr. Aykroyd has shown that at least 30 per cent of children in labour camps in poorer class districts showed eye symptoms indicative of vitamin A deficiency. Some of them suffered from "smokiness and dryness of the conjuctiva,

while others showed the yellowish foamy patches in the conjuctiva known as Bitot's spots". The diet of these children consisted of cholam, dhal and very small amounts of vegetables. Such a diet would be entirely devoid of vitamin A and contain very little carotene. Frank and severe vitamin A deficiency is, therefore, very common in India, and mild or subacute forms of vitamin A deficiency afflict a large percentage of the population.

It is said that deficiency in Vitamin A is the important factor in the causation of infantile diarrhoea, which has been treated with great success by the administration of halibut-liver oil of high vitamin A potency. Many diseases of Indian women are directly or indirectly attributed to vitamin A deficiency in their diet. Deficiency of vitamin A during the antenatal period is said to predispose the mothers to puerparal sepsis, and the administratian of cod-liver oil as a prophylactic, during and after labour, is found to improve the condition considerably.

Notwithstanding the fact that vitamin A occurs in a fair degree of abundance in many natural foods, it is clear that many persons are not receiving enough vitamin A. The consumption of foods rich in this vitamin provides protection against the inadequacy of our diets in this vitamin. The vast majority of population in India has to depend for their supplies of vitamin A upon the carotene of plants, and this is more true in the case of poor people who cannot afford to consume adequate supply of milk and butter. Leafy vegetables like amaranth, coriander, drumstick, and carrots which are rich sources of carotene should constitute the main items in the dietary. If one takes, on an average, 2 to 4 ozs. of the above leafy vegetables, probably the minimum requirement of vitamin A in the form of carotene will be supplied.

During infancy and childhood diseases due to dietetic origin occur very frequently, and the effects of the deficiency are very often carried over into later years. Infants are more likely to suffer from vitamin A deficiency than adults. It has been estimated that about 700 to 800 cubic centimeters (about 28 ounces) daily of breast milk, supplying about 2000 International Units of vitamin A satisfies the requirements of the average infant. But human milk having the same amount of vitamin A may not be obtained in India, particularly when mothers are ill fed. It is shown that the milk of European mothers is very much richer in vitamin A than that of mothers belonging to Eastern countries. Because the milk of Indian mothers is very poor in this vitamin, it is probable that vitamin A deficiency is more common among infants in India. Children fed on cow's milk suffer more from the deficiency of the vitamin than those fed on breast milk, for it is well known that cow's milk contains about one-fourth to one-tenth as much vitamin A

as good human milk. Cow's milk is unlikely to contain sufficient vitamin A to meet the infant's needs. The vitamin .A potency of cow's milk is largely dependent on the nature of the fodder. It has been shown that cows fed on green pasture produce milk of high vitamin A potency than stall-fed animals. Since animals must obtain their vitamin A requirements from plant materials, the importance of securing vitamin-rich fodder for feeding cattle is of great importance, not only to animal nutrition, but also to human nutrition.

Since the effects of the deficiency of vitamin A in infants are carried into later years and develop into gross and visible symptoms like xerophthalmia, it would be utterly dangerous to allow the shortage of the vitamin to reach the degree at which the visible signs appear. These facts clearly demonstrate the need for supplementing the infants' feeding with cod-liver oil or other vitamin A concentrates, particularly when cow's milk forms the main food material for infants. It is recommended that about 2 drops a day of good quality cod-liver oil should be given at about the 15th day and the amount should be gradually increased until the infant takes about one teaspoonful of the oil by the end of the second month.

Chevauchee de Han Oriental

In a frieze that advances and falls like the span
Of a bridge, or the arch in the life of a man
Or an army led on by some dangerous star
To something far more than the danger of war,
Is the thunder the anger the source without plan
The March to perdition the riding of Han.

A stamping of horses made frantic and mad
By the rushing of phantoms fantastic—the cavalcade
Grinding the rocks and the stones in their tread ;
The streaming of torches, the tramp of the archers
A whirring of wheels and a panting of panters,
A flashing of purple and driving ahead
Of Han of the Orient Lord of the Dead.

Above are the hawk and the eagle, below
Are the elephant, bull of the occident, unicorn
Bird of three feet called the bird of the sun
And hundreds of monkies all moving as one,
Now they stream and advance going faster and faster,
For up overhead is the comet Disaster,
That draws and compels to the uttermost hells
And below in a cursed invisible sun.

And heark to the sinister sound of a drum,
The sound of the beat of the feet of the Night,
And heark to the army of phantoms in flight,
Blown outward and onward like leaves in October
That into the Underworld tumble and enter.
The land of dumb shadows the darkness, the dumb
Abyss of nothing, the darkness to come.

Thus all flying onward and all irresistible,
Dragging the roads and the ridges asunder,
And moving and moving till nothing encumber
The speed of the march growing swift and implacable,
Till unto the dark and inevitable goal,
They pass in a whirlwind and issue in thunder.

And he at the head is he phantom or devil,
That flies as he rides in the form of a man ?
That follows a comet and keeps in the van,
Then plunges to where the green poppies grow fatal,
Vast poppies that wait till ten million of men
Come down like a swarm of great flies and each petal
Shuts fast with the deadly dark purpose of Han.

Barnett D. Conlan.

A Breach of Promise

By R. K. NARAYAN

SANKAR was candidate 3131 in the Lower Secondary Examination and he clearly saw this number on a typed sheet, announcing the results, pasted on the weather-beaten doors of the Government Middle School. That meant he would pass on to a High School now. He was slightly dizzy with joy.

He shuddered at the recollection of the same scene the year before when he had looked at the notices and found his number missing. He had thought he would never survive the failure and sit for another examination. Two of his closest friends had also passed this year, having failed with him the previous year. For them life had now acquired a new richness. There was a ring of joy in their voices and overflowing good-fellowship in every word they uttered to each other.

Sankar invited his friends to share with him a happy evening and went home to announce his success. He dinned the happy news into the ears of every person in the house, from his father down to the cook. He demanded from his mother five rupees as a reward for passing the examination, and went out.

He joined his friends. Their success was celebrated in a fitting manner. They first went to a restaurant, dragged chairs noisily about, thumped and roared and guffawed, and ate everything the waiter suggested. They stayed in the restaurant till about six and then went to the Gaiety House, which was presenting to the public of Mysore the master-piece *Blue and Black*. Sankar and his friends sat in the four-anna class. When George Lomb knitted his brow and said huskily to Vivian Troilet, " Three years ago you did not want me ; now I don't want you," the boys nodded approvingly, but it was more from habit than from a full appreciation of Georgie Lomb's talent. For even Georgie Lomb occupied only a secondary place to the Lower Secondary results. The glow of success made the lights of ordinary life a little dim.

Next morning they met at four and started for the temple on the hill. It was by the grace of Goddess Chamundi that they passed the examination and they must take offerings to her.

It was still dark when they reached the foot of the hill. All talk gradually ceased and their breathing became audible as they reached the two-hundredth step. They sat down for a while gazing at the twinkling lights of the City below. They rested till their breath came at more reasonable intervals and less noisily. Foot by foot they dragged themselves up a thousand steps—rugged granite steps—which have

acquired smoothness with the tread of a million pilgrims. They reached the top An old woman sitting behind a heap of coconuts beckoned to them, " Masters, won't you buy some offerings for the Goddess ?" They stopped before her and bought coconuts, plantains, flowers and incense.

They entered the temple and circled the corridor thrice. A priest wrapped in a green shawl held a plate before them, and they placed their offerings on it. They followed the priest into the shrine. He broke the coconuts at the altar, lighted the camphor and held up the flame before the image of the Goddess.

The diamonds on the image sparkled in the camphor light. Sankar and his friends closed their eyes and murmured, "Mother, we have passed our examination through your grace. Bless us with success in all the examinations hereafter ." The priest brought them the camphor flame on a plate; they touched it. They then received the holy water and the vermilion. Their coconuts and plantains, after they had been offered to the Goddess, were returned to them.

They went to the pillared hall outside and fell full-length on the floor before the Goddess. It was at this moment that a dreadful memory returned to Sankar's mind ; the previous year on the evening before the examination he had come to the temple and prayed for success. He had prostrated himself before the Goddess and vowed secretly that if she made him fail in the examination he would destroy himself. He did fail that year, was miserable for some time, and passed the examination this year. He might possibly have remembered his vow if two of his best friends had not failed with him, if he had not gone away, after the results, to his sister's place for a month or two and spent a most exhilarating holiday there, and if he had not passed this year. Now as he lay before the Goddess he suddenly remembered his vow.

He rose and left the temple with his friends. His soul was troubled, A vow to God was a vow. Goddess Chamundi was not a mere idol but a living presence in the City. Did she not trample the evil demon *Mahisha* under her foot and tear his entrails out when he (as Sankar thought) defied her? Wherever one went in the city one saw the pictures of this Goddess, with her hair untied and her hands blood-covered, driving a spear into the body of the demon under her foot. She was not a Goddess to be trifled with.

The next thing to do was to enjoy the plantains and the coconuts they had offered to the Goddess. They repaired to a secluded spot on the hill, shelled the coconuts and peeled the plantains. Sankar received his share, laid it beside him, and suddenly got up, saying, "I shall go and get some jaggery. We cannot eat plain coconut."

He ran towards the temple and entered the First Portal. No one was about, and he hopped on to a stone platform on the right side of the portal and slipped into a cave-like room. It was the entrance to the tower of the temple. The tower, visible for miles around, started as the broad gate of the temple, and going up, pile on pile, ended in an immense carved Monster with a red lolling tongue and bulging eyes.

Sankar climbed an ancient ladder and reached a narrow room above. There was another ladder there and it led on to another room above. There were ten flights of ladders, the rooms becoming narrower and darker at every stage.

Sankar reached the topmost room. It was stifling and musty. Bats whirred about. A narrow beam of light came in through an aperture in the wall. He put his body through the aperture, rested his feet on some figures carved in relief on the outside of the tower and reached the Monster on top. Its eyes were as big as his head. He could lie curled up in its mouth. Its red, lolling tongue was like a platform. Sankar sat on it. The world below him was a splash of sunlight. The plains, over a thousand feet below, looked like patches of grass. He looked down and said to himself that he would be unrecognisable when he reached the ground ....He closed his eyes and prayed, "Great mother, now I shall jump off from here and thus fulfil my vow. Forgive me for the delay." He suspended his prayer, disturbed by a violent smarting at the elbow. He touched it. There was blood. Somewhere, probably while heaving himself up, he had skinned his elbow. It was raw. Blood was oozing. It smarted. He groaned. He prayed now, "Great mother, you must forgive me. I cannot throw myself down. Instead, for a year I will come here every Friday and offer two coconuts." He rose very carefully, held his breath, and climbed down, resting his feet on carved images. His legs trembled. A look below made his head reel. He reached the aperture, slid through it into the top room, and sat down for a moment and closed his eyes.

* * * *

The moment Sankar appeared, his friends cursed him for taking such a long time to return and demanded, "Where is the jaggery?" Sankar turned round without a word and ran at full speed towards the shop before the temple where jaggery was sold.

Improved Agriculture and Its Bearing on Rural Uplift

By R. SWAMI RAO GARU,

Assistant Director of Agriculture.

THE stars of the Village are in the ascendant, for the talk of Rural Uplift is on the lips of everybody. All official and unofficial bodies have been asked to concentrate their attention on this subject to bring back the prestine glory of the villages.

What is the need for Rural Uplift and how does improved agriculture help it? Bad farming, bad organisation and bad business have been known to be, among others, the chief causes of the disintegration of villages. It is unnecessary to go into the details of these causes. Suffice it to say that bad farming and other causes made cultivation unremunerative and land getting into the hands of money-lenders The incubus of rural indebtedness and its attendant evils are too well known. This state of affairs coupled with a series of bad seasons made the landless ryots abandon the villages in search of employment to fill their stomachs.

The stomach problem is the most acute problem and it will exist as long as stomach exists. There is no other industry except agriculture, improved agriculture, which teaches how to fill it with substantial and nourishing food. For, improved agriculture takes into account all the contributions of science to produce the maximum profit from growing crops with minimum of expenditure. The ultimate aim is to reduce the cost of production by the accumulation of business, the reduction of wastage, the pooling of resources and a reduction of expenditure with a view to increase the standard of comfort to one who cultivates land. Hereafter the progress of a country must be judged by the progress of its agriculture adopting all scientific methods. Our beloved King, His Imperial Majesty King Edward VIII, as Prince of Wales, in 1926, said, "The Progress of Civilisation very largely depends on the development of science and its application to all phases of life affecting the every-day problems of education, health, transport, housing, land-settlement and agriculture. If substantial progress is to be made in these fields it can only be along a road of which the formations have been made by scientific thought and research".

The main source of income of the village is land. The land is cultivated for the production of crops. Generally good crops mean good income to the ryot. Below are indicated some of the ways by

which good crops can be grown subject to the usual condition that Nature helps the ryot.

A crop is the resultant of many operations done on land. These operations may be styled as the Five-fold Process involved in the production of a crop. This fivefold process includes the following operations :—

1. Preparation of land. 2. Application of manure and preparation of manure. 3. Preparation of seed and sowing. 4 After-cultivation operations and irrigation. 5 Harvesting operations.

Improvements in any one or all of the operations will result in an improvement in yield and consequently increased income to the farmer. Improvements done so far are noted below :—

1. *Preparation of Land.* Land is prepared by the time-honoured wooden plough, which cuts a wedge shaped furrow without inversion of the soil necessitating the use of the plough 3 or 4 times for a thorough ploughing. An iron mould-board plough obviates the above difficulties. Increased income has been derived from crops merely using the mould-board ploughs only. A list of ploughs recommended by the Research Engineer of the Department is found in the Villagers' Calendars of the Department. Where the land is slopy, if bunds are formed by means of a bund-former rain-water is impounded, soil fertility is not lost by erosion and better crops are assured. This is another item of improvement under this head.

2. *Application of manure and Preparation of the same.* The chief manure at the disposal of the farmer is the Farm Yard Manure. This manure is nothing but the manure obtained from his livestock plus waste fodder and other sweepings of the farm yard. The manure is generally heaped, exposed to the action of wind and rain and sun which reduces the quality of the manure and makes it absolutely useless. Throwing the manure in a pit, provided, if possible, with an impervious floor and roof, would preserve all its valuable constituents. No attempt is made to preserve urine, which if collected or made to be absorbed by a layer of earth under the feet of cattle and used in the manure pit would considerably enhance the value of this manure. By the use of available wastes on the farm the quantity of the manure can be increased. It has been proved that cattle manure influences the quality of grains produced. They are of a better vitality and have better germination. To produce better race the quality of grain taken must also be very good. Thus cattle manure has a part in improving the race of a country. It is therefore imperative that every ryot should pay attention to the proper preservation of manure—cattle manure. The Department will be glad to render any help in this matter.

Better preservation of manure also improves the sanitary condition of a farm yard and thus contributes to a better health of the farm people.

It is not enough if merely the voidings of farm stock are preserved. The voidings of human beings should also be well conserved and made available for application to land. In the present state what is happening is *depletion of land*. Mother earth should be fed well and fed with nutritious food to produce good children. A poor and ill-fed mother will produce only a lean and lanky child. The straw of plants grown in the field is fed to cattle. No attempt is made to collect urine. Dung is converted into bratties, at least 50 per cent of it. Man eats grain and he defiles places. Thus all the nourishment got from the soil is not returned. The land should be considered as a bank and we should get only interest We have been depleting the principal amounts. A day of bankruptcy will come. To prevent this, have proper latrines or convert manure pits into latrines. Let all voidings of man and his beast be put into this, covered with a layer of earth. Borehole latrines can be had if possible. If the above system is adopted villages become clean and sanitary. There will be no foul smell emanating on the approach of villages. There will be no excreta for the animals to feed upon. Work of this kind is real Rural Uplift work. It is only a change in the angle of vision of the villager that is required in the matter.

It is always a good plan to manure drylands with cattle manure, which if applied, contributes to an increased humus whose presence in a dryland is a good asset to the farmer as it is able to withstand drought.

Well preserved Farm Yard Manure results in increased income to the farmer, as it contributes to the humus content of soil.

The humus content of the soil can further be increased by growing green manure crops like Daincha, Sunnhemp and wild indigo and ploughing them in and by use of composts made out of available waste materials on the farm such as groundnut husk, cholam stubbles, cotton stalks in combination with night-soil.

Preparation of Seed and Sowing. It is common knowledge that a good seed produces a good crop. A good seed must give a higher yield and it must be disease resistant. Such seeds are available with the department and they are called strains. We have strains of paddy (G. E. B. 24), sugarcane (247—B), Ragi (E. C. 593), Cotton (N—14) Jonna (T—6) and others.

A diseased crop contributes a reduction of the yield and consequently income of the farmer. Seeds if treated before sowing are able to withstand diseases, e. g., smut on cholam can be prevented by treating the seed in a copper sulphate solution or with fungi sulphus.

By reducing the seed rate a ryot can save expenditure under this item and thus augment his income. By adopting thin nurseries using only 25 lb. of seed for 10 cents of land to transplant an acre of paddy

there is considerable saving of seed without any reduction in yield This is a case in point.

In the matter of *seed improvement* considerable strides have been made by a process known as "vernalisation" evolved in Russia. "The method of vernalisation consists in wetting the seed and keeping it under a particular temperature and humidity for a few days. Such seed could then grow in different season from that required by untreated seed and could also mature in shorter time". This process, when fully put to the test in our country, will solve the *problem of failure of Crops* in Ceded districts, for then the scientist gets control over season.

Even paddy seed, if treated and sown, will be proof against "blast" and other diseases. Seed treatment is like injection or vaccination against diseases like diarrhoea or small pox.

(4) *After-cultivation and Irrigation.* Merely sowing good seed will not do, but the young plants must be properly nurtured. All enemies, weeds and diseases and pests must be removed. If the crop is sown in lines the removal of weeds can be effected by means of bullock implements such as danthulu, junior hoe, guntaka and others.

In the matter of irrigation a roll-easy mhote wheel would go a great way in minimising the depreciation of animals and thus increase the income of the farmer. Creation of soilmulch would reduce the charges under irrigation as there would be no need for so much irrigation then.

The use of mhotes for lifting water from wells for irrigation purposes must as far as possible be avoided. In the single mhote system the animals are made to walk up and down the incline (mhote rhomp). This is not a natural method of walking. In the double mhote system the animals are yoked and unyoked. When one pair is going down the incline, the other pair will be coming up in the other direction. The driver who unyokes a pair will have to go up the incline and yoke the other pair at the top of the rhomp by carrying with him the weight of the empty bucket and the rope while holding the rope. It is true this system is cheap, efficient and simple where the full dead-weight of the animal is used, but it is fraught with danger. The other day newspapers reported an accident in Madanapalle while working this mhote.

On the other hand, if a *Persian Wheel* is put up all the difficulties mentioned above are obviated. We have put up half a dozen wheels in this district. A small pair of buffaloes will work them. A small girl can drive the animals both day and night without any danger. It is well known to all farmers that the life of the work animal at mhote is very short. By the use of the wheel noted above the life of the animal is extended and this will act as a set off against the supposed high price of the machine.

Thanks to the impetus given to Rural Uplift problems, scientists have been on the look out for inventions or improvements which will enable the ryots to get more income from land by reducing the costs. Recently an improved water lift has been designed. The lift is designed for short lifts upto 10 feet.

The "Madras Mail" of 12th September 1936 announces a design of a pump to solve the water problem in rural areas by Mr. G. Appadurai Mudaliar, the Industrial Engineer of Mysore Government. Surely the Stars of the Villager are in the ascendant. The end of his troubles seems to be in sight.

Harvesting Operations. The income of the farmer can be augmented by adopting improvements in the methods of harvest. A few examples will elucidate the point. In the case of sugarcane the "Sindwahe furnace" recommended by the department for preparing jaggery and the use of improved mills for the extraction of juice would largely minimise the cost of cultivation of sugarcane and thus increase the income. By using the above furnace there is no need for the ryot to purchase fuel for boiling down juice. The megasse and the trash could be utilised for this purpose. There is a saving of Rs. 50 on an average per acre under this item only. The area in Kurnool district under sugarcane is estimated to be 800 acres during the current year and at Rs. 50 per acre, the income to be derived by the universal adoption of the furnace would be Rs. 40,000 which is no mean income to be ignored.

Cream jaggery. Its manufacture has been demonstrated both at Cumbum and at Kalwa. Cane juice is filtered in activated carbon of paddy husk. The juice is boiled down into jaggery of good colour which brings better price than ordinary jaggery.

If cotton kapas can be gathered free from broken leaf and bract a better price can be secured. This is possible if cotton picking is finished before the sun gets very hot. There is no additional expenditure involved in this method.

Iron Guntakas of the Department (H. M. Guntaka No. 2) can be used with advantage for lifting groundnuts. This system is known in these parts. The work is done with the wooden Guntakas.

We have so far spoken about the improvement of land and how to increase the crop yield. Before we close, it is well to see something about Cattle Improvement as the improvement of land is ultimately bound up with this problem.

Cattle Improvement. This should be effected by good pedigree bulls suited to the locality. The Government supplied bulls and these can be brought under premium scheme. The Government pays Rs 100 per annum provided some rules are satisfied. Even private

bulls of approved pedigree can be brought under the scheme. There are three bulls in this district belonging to Government and of known parentages. One at the Agricultural Research Station, Nandyal, one at Kotakonda and the third at Sowderdinne. The Bull at Gorakshana Sabha, Kurnool has been brought under the scheme from 1-9-36.

All weak and useless bulls should be castrated. Animals should be fed well with cakes and green fodder. A good bull is half the herd. Special fodder crops should be raised for keeping the animals fit. Pillipesara must be grown on a large scale. The animals should be inoculated against diseases.

Improved Agriculture, Public Health and Nutrition of Man and His Farm Stock. Much work has been done in this line also. "A re-orientation has been brought about by the application of genetics to agriculture. The mango has been shown to contain good vitamin C value. This it has, but it has recently been found by Zilva to have surprisingly high vitamin A value also equivalent to that of butter. Improvements in breed and in transport might make the mango an important factor in the public health of India" (Sir Walter M. Fletcher).

Ever since the introduction of groundnuts into these parts of the presidency, chiefly Ceded Districts, there is a feeling that the feeding of animals with groundnut cake and groundnut haulms has resulted in making them rheumatic or suffering from stone in the bladder. The Veterinary Department will be better able to diagnose the cause. Groundnut is a great lime feeder. It does not come up well in soils deficient in lime; that is why it is not grown on a large scale in the West-coast where most of the soil is laterite with a poor lime content. Col. McCarrison C. I. E., M. D., D. Sc., LL. D. says, "Cattle-stones are, in India, almost invariably composed of calcium carbonate". It may be said that groundnut crop has ruined both man and his cattle. A large area must be devoted to cotton and fodder crops. Recently the inter had a complaint that ghee and butter have lost their flavour and keeping qualities. This is attributed to feeding milch animals with groundnut cake and haulms. The growing of crops – their nature and area should be controlled by State aid for it has the good of the people at heart. Then only the problem of diseases can be solved.

Says, Lt. Col. McCarrison :

"The problem in connection with all these diseases is no longer one of lack of knowledge of their nature nor of their means of prevention; but one of the improvements of the conditions of living and of food supply of the people. Indeed the greatest of all problems in India at the present time is the adjustment of the population to its food supply. It is one that is capable of solution only by the people themselves; by the exercise of self-help; by the jettisoning of old habits and customs unsuited to modern economic conditions; by

improvements in methods of agriculture, animal husbandry and industry; and above all by restraint in production."

New crops like Soya beans, cluster beans (this contains more proteids than Soya beans) and new methods of producing utmost power from food by making cholam malt and by hand-pounding rice will also go a great way in influencing the health of the people. It is these things that the rural population should learn if their economic status is to be improved.

Conclusion. Custom and tradition based on ignorance and superstition have largely been responsible in hindering the progress in agriculture. More arable farming does not pay the farmer much. It gives him only a small percentage of profit Recourse should be had to sidelines such as bee-keeping, poultry rearing, kitchen gardening and dairy farming.

The problem of the improvement of the village is largely bound up with the improvement of Man, Land and Cattle. When you think of improving the village think of M. L. C. for the three letters stand for Man and Market, Land and Labour and Cattle and Crops. If these are improved, the problem is solved.

There is no use of adopting the time-honoured methods with a view to respect tradition. Times are changing and tradition also must change with changed times and circumstances. A farmer must look ahead and always live in the present. He must come under the influence of the wave of progress and civilisation that has been sweeping over the world. If he stagnates and clings to tradition he will have to rot with his lot and he will be eclipsed by the progressive farmer as stated in the following prophetic words of Sir John Russel of Rothamsted Experiment Station.

"Science cannot cure all ills of agriculture or of modern civilisation, particularly those arising out of its very success in increasing production per acre and per man and in dispensing with the less efficient worker and producer. Indeed as science advances the efficiency line will be drawn higher and higher and an increasing proportion of people will fall below it unwanted and unemployable".

To the Youth*

By SVETOSLAV ROERICH.

It is a great pleasure for me to be here to-night and help to inaugurate what I sincerely hope will be one of many cultural and social events held under the auspices of this Association. By developing a social consciousness, the consciousness of good neighbourliness, we create that future social co-operation which, perchance, will supercede the chaos of these days. One must become socially minded in the broadest sense of this word, one must realise that education as such is a necessity, not primarily for improving our physical well-being, but for our own spiritual and moral upliftment whereby we can better serve our neighbours and humanity in general. Once we clearly establish this factor, education and its position in life finds its own proper place, and it should not, as we unfortunately too often see it, produce those millions, I should say, of unemployed educated young men. Of necessity, there shall always be only a limited number of opportunities along the special branches of knowledge. And only a very highly civilised society can produce a sufficient number of opportunities for every branch of knowledge. The youth of to-day holds the golden keys of the future. Who knows where may be the future leaders destined to lead humanity to a better future!

By constantly improving ourselves, we serve best the cause of humanity in general. One of the rules for success is hard work; I do not think that any success achieved without hard work can be of a lasting nature. There may be a stroke of luck, but it will hardly last and can very seldom be of great consequence. There is no work actually below our dignity. After all, everything is determined only by our attitude. Our attitude to outside factors and circumstances is, and can be, the only determining standard. Once we are open-minded, everything is within our grasp if we but apply ourselves. The main problem is to free our mind of prejudices and everyday habits which tend very often to hinder our further progress. We must feel free, we must feel the urge to do things, improve ourselves and be ready to sacrifice our comforts in this struggle for achievement. If we approach our problems in a half-hearted way, we can hardly expect success. It would hardly be just to expect success to come our way when success is so hard to win. The young men of to-day have tremendous opportunities before them, more, as a matter of fact, than they ever had before. Study the lives of great men—contemplate their

* The Inaugural Address delivered by Mr. Svetoslav Roerich under the auspices of the Young Men's Association, Chettikulangara, Trivandrum.

struggles and you wiil see there was no short-cut to success for them, but they were always willing to work where others wanted to play. The ease with which ideas are made to spread and encompass the world tends to quicken the process of evolution. Hence there are more opportunities and more fields for activity. By always being ready for further study and being prepared to do extra work, we qualify ourselves to be better and more useful members of society, and success may be expected in one way or another. One can hardly say with fairness that hard work has not justified itself—never be afraid to try. It is within our powers to create for ourselves a better life. Let us spread our wings; success lies within our grasp if we but apply ourselves.

In many countries, especially in America, we find numerous organizations endeavouring to bring closer together the youth of the world, creating thereby a better understanding of the psychological factors underlying every nationality. I believe it to be of the greatest importance for every individual to know as much as possible about the world at large—the various conditions which underlie the various customs and characteristics of countries and nationalities as well as the biographies of the great men they have produced. We must impartially study history and the development of nations and we shall glean through it a better understanding of factors to apply and factors to avoid in our own life. The importance of social life cannot be too strongly emphasised. By greater interchange of ideas, we broaden our consciousness and those ideas serve very often as a cataliser to bring out some of our own yet dormant thoughts. It is for this reason also that I am so happy to assist at the inauguration of what should be an extensive programme of social and cultural activities.

Spiritual Sadhana

By SVAMI SIVANADA

SAMA is the practice of eradication of desires. It is serenity or tranquillity of mind that is brought about by the annihilation of desires. According to the Tattva Bodha, *Sama* is the control of the inner organs. i. e., the organs of knowledge or five Gnana Indriyas viz., ear, skin, eye, tongue, and nose; and *Dama* is the control of external organs i. e, the organs of actions or the five Karma Indriyas, viz, speech, hand, feet, genitals and the anus. According to Aparoksha Anubhuti of Sri Sankara:—

> "*Sadeva Vasanatyaga samo ayamiti sabdithah :*
> *Nigraho bahya vrittinam dama ityabhideeyate .*"

The constant eradication of the ***Vasanas*** or subtle desires is called control of mind or ***Sama***. The restraint of external activities is called control of body or *Dama*.

According to Viveka Chudamani, the resting of the mind steadfastly on its goal i. e., Brahman (*Svalakshaye)* after having detached itself from the manifold sense objects by continually observing their defects, is called *Sama* or calmness. Turning both kinds of sense organs (viz, five Gnana Indriyas and five Karma Indriyas) away from sense objects and placing them in their respective centres is called *Dama* or self-control. When you begin to meditate by closing the eyes in your room, the mind will begin to wander after some time. Some desires will slowly crop up. If you do not try to fulfill them and if you reject the desires through discrimination, right enquiry and dispassion, this practice of relinquishing the desire is called *Sama*. By gradual and protracted practice you will get peace of mind. Here the mind is checked directly from wandering. Its outgoing tendencies are curbed. ***Sankalpas*** of objects are eradicated.

The eyes run outside to see a beautiful woman with lustful thoughts. If you at once withdraw the eye from that object, this practice is called *Dama*. You should restrain the other Indriyas also by this practice.

If you want to practise *Sama*, you ought to have cultivated *Viveka* or discrimination between the real and the unreal, and *Vairagya* or dispassion for the enjoyment of objects herein and hereafter. Then only you will succeed in the practice of ***Sama***.

Some say "The practice of *Dama* is not necessary. It is included in *Sama*. The Indriyas cannot work independently. They can work only in conjunction with the mind. If the mind is checked, the Indriyas will come under control automatically."

The mind will come under control very easily if *Dama* also is practised. It is a double attack on the enemy from within and without. He is crushed or subdued soon. If the front and back doors are closed simultaneously, the enemy is caught quite easily. There is no escape for him on any side. By the practice of *Dama* you do not allow either the Indriyas or the mind to come in contact with the objects. You do not allow the mind to come through the external instrument, eye, to assume the form of the object. In the neophytes the mind never remains self-centred, despite rigorous practice of *Sama*. It tries to run outside towards external objects. If *Dama* is also practised, it will be of immense help to curb the mind efficiently. If you tie up the hands of a mischievous boy, he tries to do mischief with the feet. If his feet are also tied up, then he keeps quiet. *Sama* corresponds to the tying up of the hands and *Dama* to the tying up of the feet. Therefore the practice of *Dama* also is necessary.

Dama is the practice of a student of Vedanta. *Pratyahara* corresponds to the practice of *Dama*. *Pratyahara* is the practice of a Raja Yogi or a Hatha Yogi. In the former it follows the practice of *Sama* ; in the latter it follows the practice of *Pranayama*. In the former the Indriyas are withdrawn by calming or restraining the mind, in the latter the Indriyas are withdrawn by restraining the *Prana*. The Indriyas can be withdrawn more effectively by the process of double withdrawal, by withdrawing the mind and the Prana at the same time. It is the mind that moves the Indriyas. It is the *Prana* that vivifies or energises or galvanises the Indriyas. *Sama* and *Dama* are strictly speaking Raja Yogic Sadhanas or practices.

If one gets *Viveka, Vairagya* will dawn by itself. If one has *Vairagya Sama*, will come by itself. If one has *Sama, Dama* will come by itself. If one has *Sama* and *Dama, Uparati* will come by itself. Some define *Uparati* as renunciation of all works and taking up Sanyasa. But you will find in Viveka Chudamani a beautiful definition. The best *Uparati* or self-withdrawal consists in the mind-function ceasing to act by means of external objects. According to Aparoksha Anubhuti of Sri Sankara, *Uparati* or extreme abstention is the turning away from the objects of enjoyment.

The mind of the student who is established in *Uparati* will never be agitated even a bit when he sees a beautiful young lady. He will only get disgusted. There will be no attraction. He will have the same feeling when he sees her which he experiences when he looks at a tree or a log of wood. When he looks at delicious fruits or palatable dishes, he will not be tempted. He will have no craving for them. There will be no watering or salivation in the tongue. He will have no craving for any particular object or dishes. He will never say "I want such and such a preparation for my food." He will be satisfied with anything that comes before him. He will never say also that such

and such preparation was good. This is due to the strength of mind he has developed by the practice of *Viveka*, *Vairagya*, *Sama*, *Dama*. Further the mind is experiencing a wonderful calmness and transcendental spiritual bliss by the above practices. It does not want these little, illusory pleasures. If you have got sugar-candy your mind will never run after black sugar. You can wean the mind from the object to which it is attached by training it to taste a superior kind of bliss. If you give cotton-seed extract to a bull or cow, it will not run towards dry grass or hay. The mind is like the bull.

Titiksha is power of endurance. A *titikshu* is able to bear pain, insult, heat and cold, without any sound or murmuring. He does not care to redress them. He is free from anxiety. He does not lament on this score. *Sraddha* is unshakable faith in the existence of Brahman, in the teachings of the Guru and scriptures and faith in one's own Self. If any one possesses the above qualifications he will get *Samadhana* or one-pointedness of mind and burning desire for liberation. The mind will move naturally towards the inner Self always. The student should now approach a Brahma Stotre—Brahma Nishta Guru, hear the Srutis, reflect and meditate on the significance of the "*Tat Twam Asi*" *Mahavakhya* constantly. He will attain Self-realisation or *Atma Sakshatkara*.

The eyes even in a Jivanmukta or a liberated Sage will move towards the objects through the force of habit. But he can withdraw them completely and make them mere empty sockets if he wills. When he sees a woman, he does not see her outside himself. He sees the whole world within himself. He feels that the woman is his own Self. He has no sex idea. There are no evil thoughts in his mind. He has no sexual attraction for her Whereas a worldly man sees the woman outside himself he entertains lustful thoughts. He has no idea of Self. He is attracted towards her. This is the difference between the vision of a Gnani and a worldly man. There is no harm in looking at woman but you must not entertain evil thoughts. Feel that the ladies are manifestations of Mother Kali. Feel that the beauty of the lady is the beauty of the Lord. Feel that all the forms are the images of the Lord. Your mind will be elevated at once.

Some students ask "Shall we practise *Viveka*, *Vairagya*, etc., in order one by one after mastering each *Anga* or shall we practise all the Angas simultaneously? If we practise one by one, perhaps we will not be able to get mastery over one or two *angas* even in this life. We may require several lives for perfect mastery over all *Angas*. Life is very short. What shall we do then?" It depends upon the temperament, taste and capacity of the students. Some like to get perfect mastery over each stage and then to proceed to the next step. Some like to practise all the limbs at a time. There is no harm in practising all the steps at a time. For six months concentrate your mind in

cultivating ***Viveka, Vairagya*** and ***Sama.*** For the next six months try to acquire ***Sraddha, Samadhana*** and ***Mumukshutwa.*** Devote more time in developing that virtue which you are seriously lacking. If you are earnest and sincere in your attempt, you can develop the four means in this very birth.

Another Vedantic Student says " Swamiji, there is no necessity for acquiring these four means of salvation, ***Viveka, Vairagya, Sama, etc.*** It is a long, tedious process. I will not be able to acquire them even in several births. The shortest way is to think of Brahman always. I will acquire all the virtues automatically. Then I will be able to practise deep meditation " He is right. A first class type of aspirant can adopt this method because he has cultivated the four means in his previous birth. A mediocre student of ordinary calibre will not be able to think of Brahman at the very outset. How can one think of Brahman when the mind is filled with impurities, when the mind is turbulent and the Indriyas are jumping and revolting ? Absolutely impossible. He may sit for thinking on the Self. He will be building castles in the air and will be thinking of sensual objects. He will foolishly imagine that he entered into ***Nirvikalpa Samadhi.*** He will mistake deep sleep for ***Samadhi.*** Many are deluded in this manner. They do not have any spiritual progress. They can have no idea of Brahman. It is only the mind that is rendered pure by the practice of ***Vairagya, Sama*** and ***Dama,*** that can have a definite conception of Brahman. Ideas of Brahman cannot be lodged in a restless, impure mind.

Those who practise Brahmacharya must be fully conversant with the technique of ***Sama, Dama,*** and ***Uparati.*** Then only will they be established in the practice of celibacy.

May you all live drowned in the Ocean of Brahmic Bliss in an illumined state through the practice of ***Viveka, Vairagya, Sama, Dama, Uparati, etc.***

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Polonius.

By JEHANGIR R. P. MODY

A garrulous fool in his second infancy,
Behind the velvet curtain hides to see,
To hear, unseen! An act of diplomacy!

At worst a knave he was, a fool at best,
For mischief-brewing he had unceasing zest,
And pompous thoughts in pompous maxims drest!

And wise was he at times, as children are,
When wonder-struck they see a falling star,
Or fear-struck when they break a painted jar!

And ween the Prince's blade sent him to hell,
His words to the dead were really chosen well:
"Thou wretched, rash, intruding fool, farewell!"

And when Polonius died by a blade accurst,
Some said: "His second childhood had his wits dispersed",
But I maintain—he had ne'er left his first!

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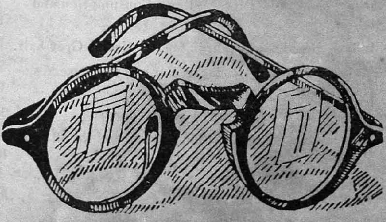

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